

RFP No. PT-2671-599428
SPECIMEN SUBCONTRACT
Dated April 26, 2005



**COST-PLUS-A-FIXED-FEE
RESEARCH & DEVELOPMENT SUBCONTRACT**

Subcontract No. SPECIMEN SUBCONTRACT

BETWEEN

**CALIFORNIA INSTITUTE OF TECHNOLOGY
JET PROPULSION LABORATORY
(The "Institute" or "JPL")
4800 OAK GROVE DRIVE
PASADENA, CALIFORNIA 91109-8099**

AND

**THIS SUBCONTRACT FOR
MARS SCIENCE LABORATORY
TERMINAL DESCENT SENSOR
IS A
SUBCONTRACT UNDER JPL's NASA PRIME CONTRACT**

TASK ORDER NO. NMO710846

A DO - C9 Rating is assigned to this Subcontract under DMS Regulation 1

The data/information contained herein has been reviewed and approved for release by JPL Export Administration on the basis that this document contains no export-controlled information.

RFP No. PT-2671-599428
SPECIMEN SUBCONTRACT
Dated April 26, 2005

CONTENTS

PREAMBLE.....	2
ARTICLE 1. STATEMENT OF WORK AND DELIVERY INSTRUCTIONS.....	3
ARTICLE 2. ALLOWABLE COSTS, FIXED FEE AND PAYMENT.....	6
ARTICLE 3. OPTION PROVISION	9
SIGNATURE PAGE	16

The following documents are incorporated into and made a material part of this Subcontract.

World Wide Web: <http://acquisition.jpl.nasa.gov/e2000.htm>

GENERAL PROVISIONS (GPs): Cost-Reimbursement with Commercial Organizations
Subcontract R 12/04, with Incorporated Exhibits.

- Management of Government Property in the Possession of Contractors, Form JPL 0968 R 10/04
- Release of Information, Form JPL 1737 R 9/99
- Affiliate Access Report, Form JPL 1943 R 2/00
- Notification to Prospective Contractors of JPL's Ethics Policies and Anti-Kickback Hotline, Form JPL 2385 R 7/91
- Certifications, Form JPL 2892 R 8/01
- Asbestos Notification, Form JPL 2895 R 9/98
- Notice of Potential Tax Withholding R 7/03

ADDITIONAL GENERAL PROVISIONS (AGPs)

Cost Accounting Standards and Administration of Cost Accounting Standards R 9/04

Designation of New Technology Representative and Patent Representative R 9/04

Disclosure and Consistency of Cost Accounting Practices, and Administration of Cost Accounting Standards R 9/04

New Technology R 9/04

Earned Value Management System R 9/04

The data/information contained herein has been reviewed and approved for release by JPL Export Administration on the basis that this document contains no export-controlled information.

RFP No. PT-2671-599428
SPECIMEN SUBCONTRACT
Dated April 26, 2005
PREAMBLE

This Subcontract, entered into on _____ by and between the CALIFORNIA INSTITUTE OF TECHNOLOGY (hereinafter called the "Institute" or "JPL"), a corporation organized and existing under the laws of the State of California, and SUBCONTRACTOR (hereinafter called the "Subcontractor"), a corporation organized and existing under the laws of the State of _____ and constituting a subcontract under Prime Contract NAS7-03001 between the Institute and the Government;

WITNESSETH THAT:

The Subcontractor agrees to furnish and deliver the supplies and perform the services set forth in this Subcontract for the consideration stated herein.

The data/information contained herein has been reviewed and approved for release by JPL Export Administration on the basis that this document contains no export-controlled information.

RFP No. PT-2671-599428
SPECIMEN SUBCONTRACT
Dated April 26, 2005
SCHEDULE

ARTICLE 1. STATEMENT OF WORK AND DELIVERY INSTRUCTIONS

On or Before

1.0 The Subcontractor shall deliver the Terminal Descent Sensor (TDS) for the Mars Science Laboratory (MSL) spacecraft (S/C), which is part of the MSL Mission. This instrument shall provide velocimetry and slant-range altimetry measurements during the Entry-Descent-Landing (EDL) phase of the MSL mission. In the performance of this effort the Contractor shall:

1.1 Design

Perform design and analysis necessary for fabrication and operation of the TDS Subsystem.

1.1.1 Preliminary Design

Generate and document a preliminary design for the TDS Subsystem to meet the requirements of the Specification (Exhibit III). This effort is to include, but not be limited to the following:

1.1.1.1 Support JPL in refining instrument requirements.

1.1.1.2 Support JPL's instrument accommodation studies

31 December, 2005

1.1.1.3 Conduct preliminary design and engineering analysis until the design meets the requirements.

1.1.1.4 Establish allocations for managed resources such as power consumption, mass, and volume.

1.1.1.5 Produce design documents, interface agreements and drawings in accordance with project plans.

1.1.1.6 Identify subassembly suppliers and provide a proposed parts list with estimated lead-time and cost for long lead-time items.

1.1.1.7 Develop a preliminary mission assurance compliance plan with JPL.

1.1.1.8 Generate performance estimates and end-

The data/information contained herein has been reviewed and approved for release by JPL Export Administration on the basis that this document contains no export-controlled information.

RFP No. PT-2671-599428
SPECIMEN SUBCONTRACT

Dated April 26, 2005
to-end error budgets using simulations
and/or breadboard model.

1.1.1.9 Participate in bi-weekly status
teleconference and Monthly Management
Reviews.

1.1.1.10 Present the results to JPL for approval at
the Preliminary Design Review (PDR).

3 July, 2006

2.0 Delivery Requirements

2.1 Except as otherwise provided in this Subcontract, the point of inspection, acceptance and delivery of all supplies deliverable under this Subcontract shall be the Jet Propulsion Laboratory, 4800 Oak Grove Drive, Pasadena, California 91109. All such supplies shall be packaged, packed, boxed, or crated in such a manner to ensure safe delivery and shall be shipped prepaid and at the Subcontractor's expense to the point of delivery.

2.2 The Subcontractor shall furnish the New Technology Representative as set forth in the Article entitled "Designation of new Technology Representative and Patent Representative" with the annual and final reports of reportable items (or certification that there were no such reportable items) described in the Article entitled "New Technology." A copy of transmittal letters for those reports shall also be sent to the Subcontracts Manager.

Interim report every
12 months
commencing on Date
of Subcontract-Final
Report within three
months of
completion of work

2.3 Form JPL 1419, "DOD Industrial Plant Equipment Requisition"

At least 30 days prior
to need for acquiring
or fabricating item

2.4 Contractor-Held Asset Tracking System (CHATS) Report

2.4.1 Monthly Submission for each calendar month
commencing from date of Subcontract through
completion

Three (3) business
days after reporting
period

2.4.2 NASA Form 1018 (or equivalent), "NASA Property in
the Custody of Contractors"

Annually, Fifteen
(15) business days
after reporting
period

Annual Submission commencing on date of
Subcontract through completion

Reporting Period
Oct 1 thru Sept 30

2.4.3 Annual Verification of Government-
Owned/Subcontractor-Held Property

Annually, 30 days
after receipt of list
from JPL thru
Subcontract
completion

*The data/information contained herein has been reviewed and approved for release by JPL Export
Administration on the basis that this document contains no export-controlled information.*

RFP No. PT-2671-599428
SPECIMEN SUBCONTRACT

Dated April 26, 2005

- | | | |
|-----|---|---|
| 2.5 | NASA Form 533M "Monthly Contractor Financial Management Report" | Monthly, by the 15 th of the month through Subcontract completion |
| 2.6 | NASA Form 533Q "Quarterly Financial Management Report | Quarterly, by the 15 th of the month through Subcontract completion |
| 2.7 | Standard Form (SF) 294, "Subcontracting Report for Individual Contracts" and SF 295, "Summary Subcontract Report" | SF 294 from date of Subcontract thru March 31 and September 30 and semiannually thereafter through Subcontract completion and SF 295 from date of Subcontract thru March 31 and September 30 and semiannually thereafter through Subcontract completion |

3.0 Exhibits

- | | | |
|-----|-------------|---|
| 3.1 | Exhibit I | - Mars Science Laboratory Contract Data Requirements List, dated 27 April, 2005 |
| 3.2 | Exhibit II | - Mars Science Laboratory Data Requirements Documents, dated 27 April, 2005 |
| 3.3 | Exhibit III | - Mars Science Laboratory Terminal Descent Sensor Specification, dated 31 May, 2005 |
| 3.4 | Exhibit IV | - MSL Project Mission Assurance Plan, JPL D-27175, dated 30 March, 2004 |
| 3.5 | Exhibit V | - Mars Science Laboratory (MSL) Project Environmental Requirements Document, Rev. 1, dated March 15, 2005 |
| 3.6 | Exhibit VI | - JPL Flight Systems Safety Requirements Document, JPL D-560, dated 9 March, 1999 |

4.0 JPL will:

- 4.1 Provide review boards for the PDR and CDR
- 4.2 Participate in the review meetings and respond to action items generated at the review meetings and assigned to JPL.
- 4.3 Review documentation per the procedures stated in Exhibit I.
- 4.4 Provide a quality assurance source inspector. JPL Quality

The data/information contained herein has been reviewed and approved for release by JPL Export Administration on the basis that this document contains no export-controlled information.

RFP No. PT-2671-599428
SPECIMEN SUBCONTRACT

Dated April 26, 2005

Assurance (QA) personnel will:

- 4.4.1 Review and approve the Subcontractor workmanship standards and critical process instructions.
- 4.4.2 Perform QA Surveys and Evaluations in conjunction with JPL Safety Survey at the Subcontractor's facilities.
- 4.4.3 Participate in all Subcontractor Material Review Board (MRB) activities. JPL QA will be a member of the Subcontractor's MRB.
- 4.4.4 Perform in-process and final inspections as required by the JPL approved Manufacturing, Inspection, and Test Flow Chart.
- 4.5 Approve or disapprove the Subcontractor's Preliminary Design.

ARTICLE 2. ALLOWABLE COSTS, FIXED FEE AND PAYMENT.

1.0 Estimated Cost and Fixed Fee.

Estimated Costs:	\$	TBD
Fixed Fee:	\$	TBD

The data/information contained herein has been reviewed and approved for release by JPL Export Administration on the basis that this document contains no export-controlled information.

RFP No. PT-2671-599428
SPECIMEN SUBCONTRACT

Dated April 26, 2005

Total: \$ TBD

Subject to any equitable adjustment, which is otherwise provided for under the provisions of this Subcontract, the fixed fee stated above shall remain constant for the performance of the work under this Subcontract. There shall be no adjustment in the amount of fixed fee or any claim for increased fixed fee because of errors or omissions made in computing the estimated cost or the fact that the actual cost varies from the estimated cost.

The total amount allotted to this Subcontract is: \$ TBD

2.0 Precontract Costs. There shall be no allowance for costs incurred prior to the date of this Subcontract. If this Definitive Contract has been preceded by a Letter Subcontract, the phrase "date of this Subcontract" as used in this paragraph shall mean the effective date of the Letter Subcontract.

3.0 Payment of Fixed Fee. The fixed fee payable under this Subcontract shall be paid to the Subcontractor in monthly installments based upon the percentage of work completed as estimated by the Subcontractor and approved by JPL; subject, however, to the provisions of the "Allowable Cost and Payment" Article of this Subcontract.

4.0 Billing Requirements:

4.1 All invoices submitted to JPL for the reimbursement of costs incurred for authorized work must conform to these requirements. All invoices submitted under this Subcontract should be COMMERCIAL type invoices. Billings prepared on a Public Voucher SF # 1034 form are not acceptable for payment purposes. The invoices should be numbered in a separate series for proper reference and must contain the following information:

4.1.1 Subcontractor's name and address

4.1.2 JPL Subcontract number.

4.1.3 Total Subcontract value.

4.1.4 Total allotted cost.

4.1.5 Total allotted fee.

4.1.6 Total allotted cost and fee.

4.1.7 Invoice date.

4.1.8 Invoice number.

4.1.9 Billing Period of performance.

4.1.10 Current and cumulative cost column.

4.1.11 Major cost elements.

The data/information contained herein has been reviewed and approved for release by JPL Export Administration on the basis that this document contains no export-controlled information.

RFP No. PT-2671-599428
SPECIMEN SUBCONTRACT
Dated April 26, 2005

- 4.1.12 Fixed fee earned and fee reserve/withhold.
- 4.1.13 Indirect billing rates used, pool, and bases.
- 4.1.14 Certification of invoice by authorized Subcontractor official, including printed name and telephone number.
- 4.2 The Subcontractor must have an adequate accounting and billing system to capture the actual costs at the authorized level as stated in the Subcontract. The Subcontractor is responsible for tracking costs and ensuring they do not exceed the authorized amount allotted for the Subcontract and, if applicable, the Contract Work Order (CWO).
- 4.3 The Subcontractor is responsible for preparing and submitting invoices for reimbursement according to the terms of the Subcontract
- 4.4 Invoices shall be submitted, in triplicate, to JPL Subcontract Payment Group, M/S 601-208, 4800 Oak Grove Drive, Pasadena, California 91109.
- 4.5 Each invoice shall include separate columns for current costs and fee, and cumulative costs and fee at both the Subcontract and, if applicable, the CWO summary level. Cumulative costs are necessary to ensure that the amounts billed do not exceed the total estimated ceiling costs of the Subcontract and/or the current Subcontract maximum authorized funding levels.
- 4.6 Each invoice shall include current and cumulative amounts billed by major cost elements, Subcontract reserves, and adjusted amounts claimed as of the date of billings.

Detailed billing instructions and samples that will ensure the correct processing of your invoices can be found at the following link:
http://acquisition.jpl.nasa.gov/pdf/CPFF_Billing.pdf.
- 4.7 When submitting an invoice for the current billing period, include both costs and fixed fee on the same invoice. A backup detail of the fixed fee earned calculation shall be submitted along with the monthly invoice to demonstrate the percentage of completion to date by the Subcontractor.
- 4.8 A copy of the approved indirect billing rates applicable to this Subcontract from the Subcontractor's cognizant government auditor must be submitted with the first invoice and whenever there is a rate change. If no cognizant government auditor is assigned, submit the proposed rates to the JPL negotiator and JPL Subcontractor Audit & Compliance Group, Mail Stop 601-207. When the Subcontractor adjusts the billing rates to reflect actual year-end allowable costs, the adjusted rates shall be submitted on a separate invoice. The Subcontractor must provide notice of the updated billing rate to the JPL Supplier Payment Group. Upon submission, the invoice will be reviewed for adequacy. Any invoice found not to be in compliance with this request will be deemed inadequate and will be returned for correction and resubmission. In accordance with paragraph (a)(2) of the ALLOWABLE COST AND PAYMENT General Provision, JPL may request additional documentation to

The data/information contained herein has been reviewed and approved for release by JPL Export Administration on the basis that this document contains no export-controlled information.

RFP No. PT-2671-599428
SPECIMEN SUBCONTRACT
Dated April 26, 2005

support claimed costs.

- 4.9 Final annual incurred indirect cost rate proposals shall be submitted within 6 months after expiration of the Subcontractor's fiscal year, as required by the ALLOWABLE COST AND PAYMENT General Provision.
- 4.10 The completion invoice shall be marked "Final." The Subcontractor should not prepare or submit the final invoice until an audit has been completed of the Subcontractor's fiscal years during which costs under this Subcontract have been incurred. A separate column shall be prepared for each of the Subcontractor's fiscal years showing the major cost elements. Any direct costs questioned as a result of the audit of costs shall be excluded from the applicable Subcontractor's fiscal year billings. Fringe, overhead, and G&A shall be computed using the final rates and listed by Subcontractor's fiscal year. Any amount billed in excess of the Subcontract value will be identified and subtracted from the total amount billed.
- 4.11 As assurance that a responsible official within your organization has reviewed your invoices, each invoice shall carry the following certification:

"I hereby certify that the above bill is correct and just, that payment therefore has not been received, and that the bill is presented with the knowledge that the amount paid hereunder will become the basis of a claim against the United States Government."

Authorized Signature
(Typed name of official)
Telephone number:

- 4.12 Allowable Costs. For the purpose of determining the amounts payable to the Subcontractor under this Subcontract, the allowability of costs shall be determined in accordance with the General Provision (GP) of this Subcontract entitled "Allowable Cost and Payment;" provided, however, that in determining the allowability of costs, the advance understandings, if any, on particular items of cost set forth below shall be given effect. In the event of any inconsistency between such advance understandings and the cost principles referred to in the "Allowable Cost and Payment" GP referenced above, the cost principles shall prevail.

4.12.1 Direct Costs: No Advance Understanding.

4.12.2 Indirect Costs: No Advance Understanding.

ARTICLE 3. OPTION PROVISION

- 1.0 JPL reserves the right to unilaterally exercise an option to generate and document a detailed design of the TDS system if the preliminary design is approved by JPL at the PDR. The Subcontractor shall perform the work described in the option in accordance with the terms set forth herein.

If JPL elects to exercise this option, it will do so by issuance of an Unilateral Modification to the Subcontract. Upon exercise of this option, the Subcontract is modified as follows:

The data/information contained herein has been reviewed and approved for release by JPL Export Administration on the basis that this document contains no export-controlled information.

RFP No. PT-2671-599428
SPECIMEN SUBCONTRACT
Dated April 26, 2005

1.1 ARTICLE 1. STATEMENT OF WORK AND DELIVERY INSTRUCTIONS, is modified as follows:

1.1.1 Add paragraphs 1.1.2 through 1.1.11 as follows:

1.1.2 Detailed Design

Upon JPL approval of the preliminary design at PDR, generate and document a detailed design of the TDS Subsystem. The effort is to include, but not be limited to the following:

- 1.1.2.1 Conduct detailed design and engineering analysis until the design meets the requirements.
- 1.1.2.2 Update allocations for managed resources such as power consumption, mass, and volume.
- 1.1.2.3 Update design documents, interface agreements and drawings all under configuration control in accordance with project plans.
- 1.1.2.4 Work with JPL to resolve any parts qualification issues and finalize the parts list.
- 1.1.2.5 Update performance estimates and end-to-end error budgets using refined simulations and/or breadboard model.
- 1.1.2.6 Work with JPL to produce instrument risk assessment and determine the measurement margins.
- 1.1.2.7 Develop plans for fabrication, inspection, assembly, and test.
- 1.1.2.8 Implement a Mission Assurance program in accordance with the MSL Mission Assurance Plan in Exhibit IV.
- 1.1.2.9 Order long-lead parts, per JPL authorizations.
- 1.1.2.10 Present the results of the detail design effort to JPL for approval at the Critical

31 March, 2007

The data/information contained herein has been reviewed and approved for release by JPL Export Administration on the basis that this document contains no export-controlled information.

RFP No. PT-2671-599428
SPECIMEN SUBCONTRACT

Dated April 26, 2005

Design Review (CDR) prior to proceeding with flight hardware parts or material procurement or fabrication and test.

1.1.3 Fabricate and Procure

Provide the parts, subassemblies, and assemblies required by the approved design for the following deliverable items (see definitions in Appendix A):

- | | | |
|---------|--|-------------------|
| 1.1.3.1 | Two (2) Engineering Models (EM). | 23 February, 2007 |
| 1.1.3.2 | One (1) Qualification Unit for environmental testing. | 30 November, 2007 |
| 1.1.3.3 | Three (3) Flight Units that meet the Specification in Exhibit III. | 21 December, 2007 |
| 1.1.3.4 | All operational software needed to validate the TDS. | |

1.1.4 Assemble

Assemble the deliverable end items called out in paragraph 1.1.3 above from previously fabricated and procured elements.

1.1.5 Test and Integrate

Perform the following tests on the end items called out in paragraph 1.1.3 above:

- | | |
|---------|--|
| 1.1.5.1 | For the Engineering Models, inspections, and post-fabrication functional test per specifications in Exhibit III. |
| 1.1.5.2 | For the Qualification Unit, qualification test regimen per specifications in Exhibit III. |
| 1.1.5.3 | For the Flight Units, flight acceptance test regimen per specifications in Exhibit III |

1.1.6 Mission Assurance

Provide a Mission Assurance Plan or specific discipline assurance plans that shall define in detail the assurance programs to be employed

The data/information contained herein has been reviewed and approved for release by JPL Export Administration on the basis that this document contains no export-controlled information.

RFP No. PT-2671-599428
SPECIMEN SUBCONTRACT

Dated April 26, 2005

during the flight instrument development process. Utilization of existing documentation, processes, and procedures are recommended if they comply with the requirements in Exhibit IV, JPL D-27175, MSL Project Mission Assurance Plan. The applicable mission assurance disciplines shall include the following:

1.1.6.1 Reliability Engineering

1.1.6.2 Environmental Requirements
Engineering as specified in Exhibit V,
JPL D-21382, the MSL Environmental
Requirements Document

1.1.6.3 Problem/Failure Reporting

1.1.6.4 Electronic Parts Engineering

1.1.6.5 Materials and Processes

1.1.6.6 Contamination Control

1.1.6.7 Hardware and Software Quality
Assurance

1.1.6.8 System Safety

Comply with the systems safety requirements contained in Exhibit VI, JPL D-560, JPL Flight Systems Safety Requirements Document. Any and all deviations from this document shall be reviewed and approved by the MSL System Safety Engineer.

1.1.6.9 Configuration Management

Implement Configuration Management (CM) procedure in accordance with MSL Configuration Management Plan.

1.1.6.10 Planetary Protection

Implement Planetary Protection procedure in accordance with the MSL Planetary Protection Plan.

1.1.7 Logistic Support

1.1.7.1 Parts, Materials, and Processes

The data/information contained herein has been reviewed and approved for release by JPL Export Administration on the basis that this document contains no export-controlled information.

RFP No. PT-2671-599428
SPECIMEN SUBCONTRACT
Dated April 26, 2005

Provide a Final Design Package containing all information necessary to specify the design including but not limited to the following:

1.1.7.1.1 Materials List.

1.1.7.1.2 Parts List.

1.1.7.1.3 Final as-built drawings.

1.1.7.1.4 A mass breakdown of all components.

1.1.8 Test Equipment

1.1.8.1 The Subcontractor shall have access to thermal vacuum chamber capable of performing temperature cycling tests that covers the temperature limits specified in § 5.2.1 of Exhibit III.

1.1.8.2 The Subcontractor shall have access to vibration chamber capable of performing vibration qualification tests specified in §§ 5.2.4 and 5.2.5 of Exhibit III.

1.1.9 Shipping and Handling

1.1.9.1 The Subcontractor shall provide JPL with a minimum of 5 working days prior notification of delivery dates to allow optional hand carry of hardware to JPL by the JPL CTM or representative.

1.1.9.2 The Subcontractor shall individually wrap hardware for delivery in electrostatic discharge (ESD)-safe material.

1.1.9.3 The Subcontractor shall place the wrapped hardware in carrying cases provided by JPL. Each container will hold one unit.

1.1.9.4 If the hardware is not hand carried, the Subcontractor shall place each of the JPL provided carrying cases into a separate secondary shipping container

The data/information contained herein has been reviewed and approved for release by JPL Export Administration on the basis that this document contains no export-controlled information.

RFP No. PT-2671-599428
SPECIMEN SUBCONTRACT

Dated April 26, 2005

that provides mechanical protection to the JPL carrying case. All cases shall have shock sensors and shall meet requirements for humidity and corrosion protection for long term storage.

1.1.10 Technical Manuals and Publications

Prepare and deliver the documents listed in Exhibit I, the Subcontractor Data Requirements Listing (SDRL). The formats of the documents are described in Exhibit II, the Data Requirements Documents (DRDs). All documents shall be reviewed and approved by JPL in accordance to the procedure described in Exhibit I.

1.1.11 Program Management

1.1.11.1 At JPL's request, provide access to the data relating to technical matters directly pertaining to the work being performed under this Subcontract.

1.1.11.2 Technical Support

Provide technical support to perform studies and analyses, as may be directed by the JPL Contract Technical Manager (CTM) using the Technical Direction Memorandum (JPL Form 2084S).

1.1.11.3 The Subcontractor shall notify the JPL CTM and Subcontract Manager (SM) when:

- a. There are significant problems that require work around plans.
- b. Five (5) days prior to technical meetings wherein JPL participation is required.
- c. Five (5) days prior to QA inspection.

1.1.12 Reviews and Meetings

1.1.12.1 Kick-off Meeting

The data/information contained herein has been reviewed and approved for release by JPL Export Administration on the basis that this document contains no export-controlled information.

RFP No. PT-2671-599428
SPECIMEN SUBCONTRACT

Dated April 26, 2005

A kick-off meeting shall be held at the Subcontractor's facility to discuss plans for the contract. The kick-off meeting shall include presentation of a detailed work schedule that will accommodate the reviews and deliveries within this statement of work.

1.1.12.2 PDR

3 July, 2006

The PDR shall be held at the Subcontractor's facility and shall demonstrate that the preliminary design meets all system requirements with acceptable risk. It shall show that the correct design option has been selected, interfaces identified, and verification methods have been satisfactorily described. It shall establish the basis for proceeding with detailed design. It shall also cover revised cost and schedule based on final instrument requirements

1.1.12.3 CDR

12 March, 2007

The CDR shall be held at the Subcontractor's facility. It shall disclose the complete system design in full detail, ascertain that technical problems and design anomalies have been resolved, and ensure that the design maturity justifies the decision to initiate fabrication/ manufacturing, integration, and verification of mission hardware and software. It shall include revised cost and schedule.

1.1.12.4 Pre-Ship Review

15 December, 2007

This review shall be held at the Subcontractor's location and shall close out any actions generated at the CDR and ensure that the TDS unit(s) meets all operational requirements (functional, interface, and performance) stated in the specification.

1.1.12.5 Monthly Management Review

The MMR shall be held alternately at JPL and at the Subcontractor's facility.

The data/information contained herein has been reviewed and approved for release by JPL Export Administration on the basis that this document contains no export-controlled information.

RFP No. PT-2671-599428
SPECIMEN SUBCONTRACT

Dated April 26, 2005

It shall cover accomplishments during the month and planned work for the following month. It shall also identify any programmatic or technical risks.

1.1.12.6 Bi-Weekly Status Teleconferences

The contractor shall participate in teleconferences every other week to discuss management and technical issues. The Subcontractor's Project Manager shall attend, and include anyone pertinent to that meeting's discussions.

1.2 ARTICLE 2. ALLOWABLE COSTS, FIXED FEE AND PAYMENT, is modified as follows:

Delete paragraph 1.o and substitute:

1.0 Estimated Cost and Fixed Fee.

Estimated Cost:	\$	TBD
Fixed Fee:	\$	TBD
Total:	\$	TBD

Subject to any equitable adjustment, which is otherwise provided for under the provisions of this Subcontract, the fixed fee stated above shall remain constant for the performance of the work under this Subcontract. There shall be no adjustment in the amount of fixed fee or any claim for increased fixed fee because of errors or omissions made in computing the estimated cost or the fact that the actual cost varies from the estimated cost.

The total amount allotted to this Subcontract is: \$ TBD

IN WITNESS WHEREOF, the parties hereto have executed this Subcontract as of the day and year first above written.

CALIFORNIA INSTITUTE OF TECHNOLOGY

By:

(Signature)

By:

(Signature)

The data/information contained herein has been reviewed and approved for release by JPL Export Administration on the basis that this document contains no export-controlled information.

RFP No. PT-2671-599428
SPECIMEN SUBCONTRACT
Dated April 26, 2005

(Name)

(Name)

Instructions to Subcontractor: Do not insert date on Preamble page.

The data/information contained herein has been reviewed and approved for release by JPL Export Administration on the basis that this document contains no export-controlled information.